### Freeform Search

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<u>L3</u>	(image or file or film or picture or pictorial)near4 (crop\$4 or cut\$4 or mask\$4) near4 (magnif\$7 or scal\$5 or enlarg\$6) with (long\$7 or size or x or axis) and @ad<20010709	352	<u>L3</u>
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Generate Collection Print

L4: Entry 5 of 308

File: PGPB

Sep 26, 2002

DOCUMENT-IDENTIFIER: US 20020135794 A1

TITLE: Internet delivery of digitized photographs

### Application Filing Date:

20010320

### Summary of Invention Paragraph:

[0020] As shown in FIG. 1, this process includes a user's browser displaying a photo display <u>size picture 110</u>, a portion of the entire image that the user <u>crops</u> to enlarge 120, a corresponding full-size photograph at the photo web server 130, a photo display size image enlarged from the cropped area mapped within the full-size original picture 140, and a photo display size of the cropped area displaying in the user's browser 150.

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Generate Collection Print

File: USPT

L4: Entry 34 of 308

Oct 5, 2004

DOCUMENT-IDENTIFIER: US 6801334 B1

TITLE: Index print producing method, image processing system, image processing

method and image processing device

# Application Filing Date (1): 19990528

### Brief Summary Text (67):

The processing means according to the present invention is not limited to perform the image processing including change in the outline of the image, such as the distortion aberration correction processing and the processing for correcting chromatic aberration of magnification. When image data is image data representing an image projected via a lens, an image processing device according to a seventeenth aspect of the present invention may have a structure wherein, on the basis of a central position of an image represented by image data, a central position of a range instructed by the instructing means, and information related to the lens characteristics acquired by the acquiring means, the processing means performs at least one of: enlarging/reducing processing to enlarge or reduce an image represented by data cut out by the cutting means to a predetermined size; peripheral darkening correction processing to correct reductions in the luminosity in the edge portions of an image caused by the lens; and focal blurring correction processing to correct reductions in the lens.

### Brief Summary Text (68):

When the enlarging/reducing processing is performed, a so-called <u>cropping</u> processing in which a portion of the image is cut to enlarge or reduce the portion to the required size can be achieved. Specifically, the enlargement or the reduction of an image can be performed by making the number of pixels (the resolution) of the cut data coincide with the number of pixels (the resolution) corresponding to the output form (for example, recording on a recording material, display on a display means, storage of the image data on an information storage medium, or the like) of the image. The numbers can be made to coincide with each other by an operation of the cutting means to convert the number of pixels (the resolution) of cut data.

### Detailed Description Text (170):

The film image photographed and recorded on a photographic film by the film with lens attached encounters geometrical distortion aberration (so-called pincushion type distortion aberration) as shown in FIG. 16A. FIGS. 16A and 16B show examples in which an image having a multiplicity of lines disposed in a lattice configuration has been photographed and recorded on a photographic film by a film with lens attached. If the image having the above-mentioned geometrical distortion aberration is subjected to the distortion aberration correction processing, the contour of the image is formed into a so-called barrel shape, as shown in FIG. 16B. Thus, a region having uncertain density (a bland region or a region having an uncertain density indicated with void portions adjacent to the four corners of the image shown in FIG. 16B. Hereinafter, call image void region) is produced. Therefore, when the distortion aberration correction processing is performed, image data (for example, image data in a range indicated with an alternate long and short dash line shown in FIG. 16B) must be cut from image data subjected to the

distortion aberration correction processing to prevent the fact that the image void region is not included in the output image. Then, <u>cut image data must be subjected to an enlarging/reducing processing in accordance with the size</u> of the output image.

### Detailed Description Text (199):

In step 584 (the set-up calculating section 144A of) the automatic set-up engine 144 calculates the coordinates of the position of the center of the specified cropping range equivalently to step 510. In accordance with the size of the cropping range on the image, to be processed, and the size of the output image, the enlargement/reduction ratio of the image (the image to be cropped) is calculated. In step 586 communication of the position of the outline of the cropping range, the coordinates of the position of the center of the image, the calculated coordinates of the center of the cropping range and the enlargement/reduction ratio of the image to the image processor 140 is performed together with the conditions for the other image processings. Then, the processing is completed.

### Detailed Description Text (204):

The enlarging/reducing processing which is performed by the other image processing section 140Z is performed in accordance with the enlargement/reduction ratio set and communicated in step 508 if execution of the cropping is not specified. With reference to the position of the center of the image, the image is enlarged or reduced. If execution of the cropping is instructed, the enlarging/reducing processing is performed in accordance with the enlargement/reduction ratio set and communicated in step 584. With reference to the position of the center of the communicated trimming range. As a result, reduction in the brightness of the marginal portion of the image caused by the marginal light extinction of the lens and geometrical distortion aberration and color misregistration caused by the distortion aberration and chromatic aberration of magnifications of the lens can accurately be corrected. As a result, image data can be obtained which is free from image voids and which has been enlarged or reduced to cause the image portion corresponding to the specified cropping range to coincide with the size of the output image.

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L4: Entry 81 of 308

File: USPT

Sep 24, 2002

DOCUMENT-IDENTIFIER: US 6456732 B1

TITLE: Automatic rotation, cropping and scaling of images for printing

### Abstract Text (1):

A method for automatically cropping, rotating, and scaling a scanned image to ensure that a printed copy of the scanned image is the same size as the original, when possible. The method attempts to honor the default or operator designated orientation of the printed image, but will automatically rotate the image if that will eliminate unnecessary image reduction. Optimal orientation and scaling factors are automatically determined based on the target page size and the size and shape of the information of interest in the original image (not the boundaries of the original document). The operator selects a desired printed orientation (or accepts a default orientation) and selects a desired printed paper size (or accepts a default printed paper size). If an image will fit within the printable margins without rotation or cropping, the image is simply printed without modification. If the image will fit without rotation by cropping white space, then white space is cropped. If the image with all white space cropped will still not fit, the image is oriented so that long sides on the cropped image align with long sides on the printed paper. If the cropped and rotated image still does not fit, the cropped image is scaled to fit within the printable margins and the image is oriented so that long sides on the cropped image align with long sides on the printed paper.

# Application Filing Date (1): 19980911

### Brief Summary Text (9):

One goal of the present invention is make the printed image the same size as the original image (or slightly larger) when possible. The method attempts to honor the default or operator designated orientation of the printed image, but will automatically rotate the image if that will eliminate unnecessary image reduction. Optimal orientation and scaling factors are automatically determined based on the target page size and the size and shape of the original image (not the boundaries of the original document). The operator selects a desired printed orientation (or accepts a default orientation) and selects a desired printed paper size (or accepts a default printed paper size). If an image will fit within the printable margins without rotation or cropping, the image is simply printed without modification. If there is white space that can be cropped, and if the image will fit without rotation by cropping white space, then white space is cropped. If the image with all white space cropped will still not fit, and if the image is not oriented so that long sides on the cropped image align with long sides on the printed paper, then the image is rotated. If the cropped and rotated image still does not fit, the cropped and rotated image is scaled to fit within the printable margins and the image is oriented so that long sides on the cropped image align with long sides on the printed paper.

#### Detailed Description Text (4):

FIG. 1C illustrates a first aspect of a method in accordance with the present invention, which is to digitally crop the image before sending the image to a printer or to software for printing, so that the resulting information of interest 106 (text in the example) in FIG. 1C is the same size as (or larger than) the

corresponding information of interest in FIG. 1A. One approach is to simply always crop (delete margin data) the entire margin 104 of FIG. 1A so that the information of interest 106 in FIG. 1C extends to the edges of the printable area depicted by line 108. If a large margin is entirely cropped, the image of interest may be enlarged if sent to software for printing. Alternatively, if the goal is to always keep the printed image the same size as the original image of interest, sufficient margin may be cropped to keep the printed image the same size as the original even if sent to software for printing. If the cropped image is to be sent direct to a printer, printers typically do not scale, so that full cropping will still result in the printed image of interest having the same size as the original image of interest. If margins are completely cropped, the image of interest is then preferably centered horizontally and vertically within the printed page. One reason for centering is to avoid printing the image of interest in the upper left corner where a staple may interfere. Note that some images may not have any white space to be cropped, and some images may have a lot of white space, only some of which needs to be cropped. In general, if white space is present, sufficient cropping is performed to make the resulting cropped image fit, if possible.

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L4: Entry 168 of 308

File: USPT

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May 5, 1998

DOCUMENT-IDENTIFIER: US 5748755 A

\*\* See image for Certificate of Correction \*\*

TITLE: Picture checks

Application Filing Date (1):
19960425

### Brief Summary Text (9):

Once the image is in the form of a digital image file in the personal computer, and with the aid of a suitable software package, the <u>image is cropped and scaled to the required size</u> and then converted to an appropriate image file format for further processing.

### <u>Detailed Description Text</u> (5):

Once the image is in the form of a digital image file in the personal computer 20, and utilizing the above mentioned software package, the <u>image may be cropped and scaled to the required size</u> and then converted to an appropriate image file format for further processing. In the manufacture of bank checks, for example, the check itself is composed as a graphics image file in the personal computer 20 through the use of a graphic input tablet 24, a graphics display system, and a forms composition software package located within the personal computer 20. The text on the check relating to the checking account owner (name, address, phone no., etc.) and the bank (name, address, branch, etc.) is then composed in an easily edited format.

### CLAIMS:

8. The method of claim 1 wherein the digital image <u>file created in step b</u>) is cropped and scaled to a required <u>size</u> and converted to an image file format.

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Generate Collection Print

L4: Entry 183 of 308

File: USPT

Sep 3, 1996

DOCUMENT-IDENTIFIER: US 5551160 A TITLE: Calculating graphic scaler

Application Filing Date (1):
19940824

### Detailed Description Text (3):

As previously indicated, the present invention relates generally to the preparation of a graphic image for processing, and more particularly, to a calculating graphic scaler in the form of a system which provides for visual cropping of the image, measurement of a cropped image's dimensions, and determination of a reduction/enlargement percentage which corresponds to a desired change in image size. A preferred embodiment of such system is depicted in the drawings, the system being indicated generally at 10.

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L4: Entry 210 of 308 File: USPT

Dec 29, 1992

DOCUMENT-IDENTIFIER: US 5174031 A TITLE: Proportional cropping template

### Abstract Text (1):

An assortment of proportional cropping templates for film, contacts or prints designed with various cutouts and having demarcations to give depth measurements when selected image is enlarged to a specific width size. An assortment of templates of preferred embodiment such as metal, tinted acetate or plastic, each designed to overlay on film, contacts or prints. Each template will have various sized vertical cutouts to allow tracing and viewing of any desired crop selection. Each cutout has along either side, inch demarcations that represent the actual depth size of an image when that cutout portion is enlarged to the specific width size labled on the template.

## Application Filing Date (1): 19890424

### Detailed Description Text (9):

The width of a picture is determined by the number of columns it is to cover. The cropped image is enlarged until its width fills the selected column size. The depth dimension is enlarged proportionally and, with prior art, requires a proportional wheel, or the darkroom enlarger to determine the depth dimensions.